

WESTMINSTER

RAE 2008, RA2 - H 30

BARBER, Peter

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Output 4 (Design)

TANNER STREET

Barber, Peter (2007)

Tanner Street Estate, Barking

General Description:

Peter Barber in this project again tackled the issue of designing a substantial mixed-use scheme, but this larger scheme consisted of 250 living units and community, work and retail spaces shaped into a novel terrace/courtyard hybrid. Altogether, it creates a distinctive higher-density urban quarter in Barking, forming part of the wider regeneration plan for that town within the so-called 'Thames Gateway' development to the east of London. This also happens to be an area riven by social problems due to reactions to an influx of new residents, many of them who are from ethnic minority groups, which has enabled the BNP to make headway in local elections. The local Labour MP, Margaret Hodge, has said she hopes that the provision of better quality new housing such as in the Tanner Street Estate will help to dispel these community tensions.

What the scheme does in essence is to develop the Donnybrook Quarter model to create a lower cost and thus more widely applicable system which can be used for larger estates. Its budget was just £1,150 per sq m, as compared to £1,750 per sq m that Barber was allocated for the Donnybrook Estate, and about half the level of costs in most private housing in London (new-build or conversion). Jestico & Whiles were brought in as collaborating architects on the project to help with the construction phase, but the research and design work was done 100% by Barber - with Jestico & Whiles being allocated a 18-storey residential tower on the scheme's periphery to design themselves. Altogether the Tanner Street Estate represents the largest application to date of Peter Barber's vision of an urbanistically-driven housing model, and variants on this model are now being pursued in a host of other schemes by Barber for towns as diverse as Milton Keynes, Exeter, Hove and Morecambe. These latest projects are also being used to test out a range of different constructional techniques in search of the cheapest, most optimal solution.

Research Questions:

The primary research issues in the Tanner Street scheme include:

- (1) How to use the program requirements and site conditions in the local area to create a new model of high-density mixed-use building that would act as a counterblast to what is otherwise a messy, sprawling suburb.
- (2) How to use this project as a means to reinforce the centrality of the urban street as the main generator of social and economic life.
- (3) How to utilise physical model-making to test out complex housing permutations, and then how to use mass production technologies to meet the extremely tight budget and construction schedule - in this case by using a prefabricated timber-panel system.

Thus the core of the research work behind the Tanner Street Estate, or its forthcoming compatriots, lies in how to accelerate and reduce the cost of mass housing provision, but in doing so also to be able to devise housing models which can still be contextual in terms of their relationship to the urban street and to the specifics of the given site.

Aims/Objectives:

(1) To conceive a way of looking at sustainable architecture in what are essentially urban rather than technological terms.

Back in 1997, the Urban Taskforce Report chaired by Lord Rogers produced a strong set of recommendations, which through the government's subsequent Urban White Paper made a new kind of project possible. The Urban Taskforce recommended a radical rethinking of zoning policy that for generations has given us boring and inconvenient mono-functional neighbourhoods. It recommended the introduction of tax breaks for the development of sites and perhaps most significantly, it recommended the introduction of new planning guidelines allowing construction and 'estate renewal' on a scale unseen since the immediate post-war period. Such a programme has the capacity to deliver the construction and refurbishment of hundreds of thousands of urban dwellings, as well as offering opportunities for us to create whole new city quarters. Schemes such as the Tanner Street Estate are important experiments towards achieving that goal.

(2) To re-establish urban design, and above all the need for a close and direct relationship with the street, as the primary driver in urban housing design.

Here it should be noted that Peter Barber again made good use in the Tanner Street scheme of Space Syntax analysis, as developed by Bill Hillier at UCL. While this technique cannot account for all aspects of urban design, it is a useful tool in trying to assess what would be the most successful circulation connections to be made in a housing estate, ensuring it will fit into the surrounding urban network as effectively as possible. This analysis for the Tanner Street Estate was once more provided by Ben Stringer of the University of Westminster. Furthermore, in an attempt to ascertain the reality on the ground, and to provide a research basis for studying the issue of urban vitality through street design, a post-occupancy research project into the Tanner Street Estate has also been started at the University of Westminster. It is being led by Murray Fraser and Ben Stringer, and also incorporates Austin Smyth, head of that university's Department of Transport, to discover how the scheme is faring in practice and how occupants might have had their transit and movement patterns affected by the design.

(3) To investigate means of reducing housing production costs through the adoption of innovative technologies, in order to speed up the provision of mass housing.

In the Tanner Street Estate, extensive research into the costs of housing provision led to the selection of an imported prefabricated timber-panel system, which has helped to cut the costs to a bare £1,150 per sq m and also to speed up the erection process greatly. It is however a system which is inherently less flexible and adaptable than brick/blockwork construction, but it does have the corresponding benefit of reducing the time spent on site. Subsequent housing schemes are now being used as testing grounds by Peter Barber Architects to experiment with techniques of metal-frame construction, which is common practice in the USA, or with the use of timber frames clad with timber shingles, to see if these or other constructional permutations might deliver reductions in cost and construction time. Examples of these newer projects are included in this document.

Here it is important to note that with the decline of Welfare State provision of social housing, and of funding for bodies like the Building Research Establishment, the impetus for cutting-edge research into new domestic construction systems is very much falling into the hands of innovative and ambitious practices like Peter Barber Architects.

Context:

Peter Barber is widely acknowledged as one of the most talented British architects who is operating in housing design, linking his research into the nature of street life with the creation of innovative high-density housing models. The Tanner Street Estate thus contributes squarely to contemporary research into higher densities of urban living, as being urged upon the profession by bodies such as the Urban Task Force, and articulated by leading architectural figures like Lord Richard Rogers and Ricky Burdett.

As such, the Tanner Street scheme needs to be seen as a further contribution towards investigations into the social consequences of densified urban living, and is pursued with the ultimate aim of improving urban sustainability. The notion of the street as the locus for social interaction has a long pedigree in architectural thought, as promoted by writers like Jane Jacobs and Richard Sennett. Peter Barber is thus following very much in their footsteps, and indeed prior to Tanner Street he had designed a well-received masterplan proposal which sought to renewed the sense of street culture in two Dalston estates, the Haggerston East and Kingsland Estates, as discussed in *Building Design* (9 March 2001, pp. 12-13) and *Local Government News* (July/August 2001, p. 16). Many of the ideas first developed in this masterplan were later to resurface in the Tanner Street Estate and other housing projects by Barber, such as the Donnybrook Quarter.

Furthermore, the Tanner Street Estate should also be seen as a critique of the suburbanising tendency of so much of the current and proposed development in the 'Thames Gateway' area, where something like 200,000 housing units are meant to be built in the next few decades. Lacking adequate transport connections or social services, the kinds of housing proposed by developers for the 'Thames Gateway' have been widely condemned by the national press and architectural journals, as well as by luminaries such as Lord Rogers, Lord Foster and Hank Dittmar, Director of the Prince's Foundation for the Built Environment. Barber's passionate vision for an alternative, higher-density urban concentration (what would be in effect a brand new city) in the 'Thames Gateway', as articulated in an essay which he wrote in *Building Design*, is one that is shared by Lord Rogers and others.

Research Methods:

Numerous visits were made to the Barking site in order to understand its inherent complexity and potential. Extensive discussions were then held with the client, and also the local planning officers, to see how far they would allow the dominant local housing density levels to be increased in in what is otherwise a solidly suburban district. Concurrently a variety of programmatic solutions and spatial permutations, as well as the detailed three-dimensional complexity of each of the estate and its surroundings, were tested out through extensive physical model-making and other forms of visualisation. These analyses in turn allowed the refinement of the overall configuration of the building in terms of accessibility, circulation, lighting conditions, structural expression, housing typologies, and general functional viability. The many physical models were all constructed with the same logic as the real construction operations would be on site, being regularly and quickly updated throughout the whole process.

Again an important part of the research methods of Peter Barber was to look at historical and contemporary exemplars of housing, and again the projects of Alvaro Siza were amongst those seen as most influential on the thinking behind the Tanner Street Estate.

Dissemination:

The Tanner Street Estate is still relatively new in terms of receiving critical attention, whether this be positive or not - but certainly so far it has been written up sympathetically in the architectural press, such as can be seen in:

- Woodman, Ellis. 'Through the Gateway', *Building Design*, 16 March 2007, pp. 10-13.
- Slavid, Ruth. 'RIBA Design Awards', *Architects' Journal*, 28 June 2007, p. 68.

Peter Barber is frequently invited to give public lectures on his architectural work, now having presented nearly 50 talks across Britain and in countries abroad. As well as the perhaps more expected lectures to architectural schools, the RIBA, or the Architectural League of New York, these talks by Barber have also included an invitation to address a symposium on contemporary urbanism in Genoa, Italy (May 2005), or the special session on housing policy at the Labour Party Conference in Manchester (October 2006), or most recently at a multidisciplinary event on urban development for Middle Eastern city mayors held at the Museum of Contemporary Art in Tehran, Iran (October 2007). Talking about the Tanner Street Estate forms a major element of these public lectures on his design work.

Esteem Indicators:

The Tanner Street Estate has already won several significant awards, despite its relatively youthful age, and these include:

- Housing Design Award (2005; shortlisted again in 2007)
- RIBA Regional Design Award (2007)

In addition, and to a large degree due to his work on the Tanner Street project, Peter Barber has recently been awarded with the following prize:

- Winner of Affordable Housing Architect of the Year in the *Building Design* Annual Awards (2007)

Here it is worth quoting at length the encomium in *Building Design* to explain why their judges arrived at the above decision:

'Over the past 10 years, Peter Barber Architects has blazed a trail through the UK public housing scene with radical and innovative housing projects, from the large scale including Tanner Street Gateway, Barking, and Donnybrook Quarter in east London, to beautifully crafted projects like the Cedars Road Pavilion in south-west London.'

'The judges said it was inventive with plan and section, creating places that feel more generous than normal rules allow. They felt the work represents a significant turning point in the culture of British housing provision, and could compete with the best of the private sector and win.'

[*Building Design*, 2 November 2007. p. 11]



Image 1: Earlier masterplan scheme for the Haggerston East and Kingland estates in Hackney, creating a street presence and introducing various 'notched' terrace typologies

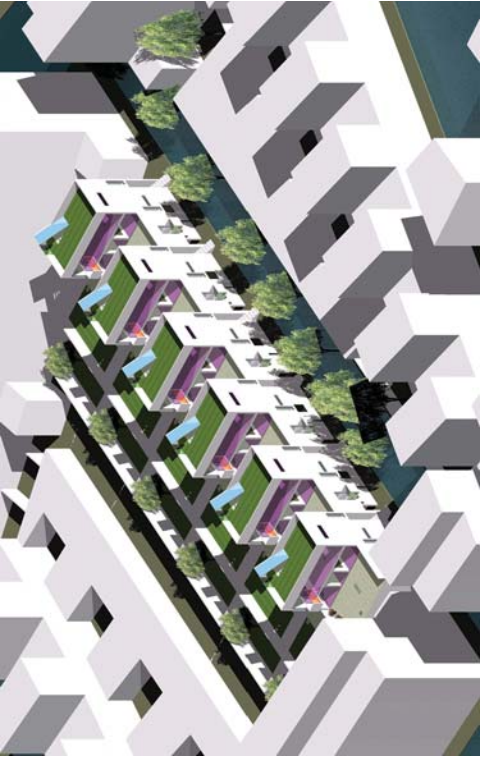


Image 2: Haggerston and Kingsland site plan and housing types



Image 3: Axonometric of Tanner Street Estate

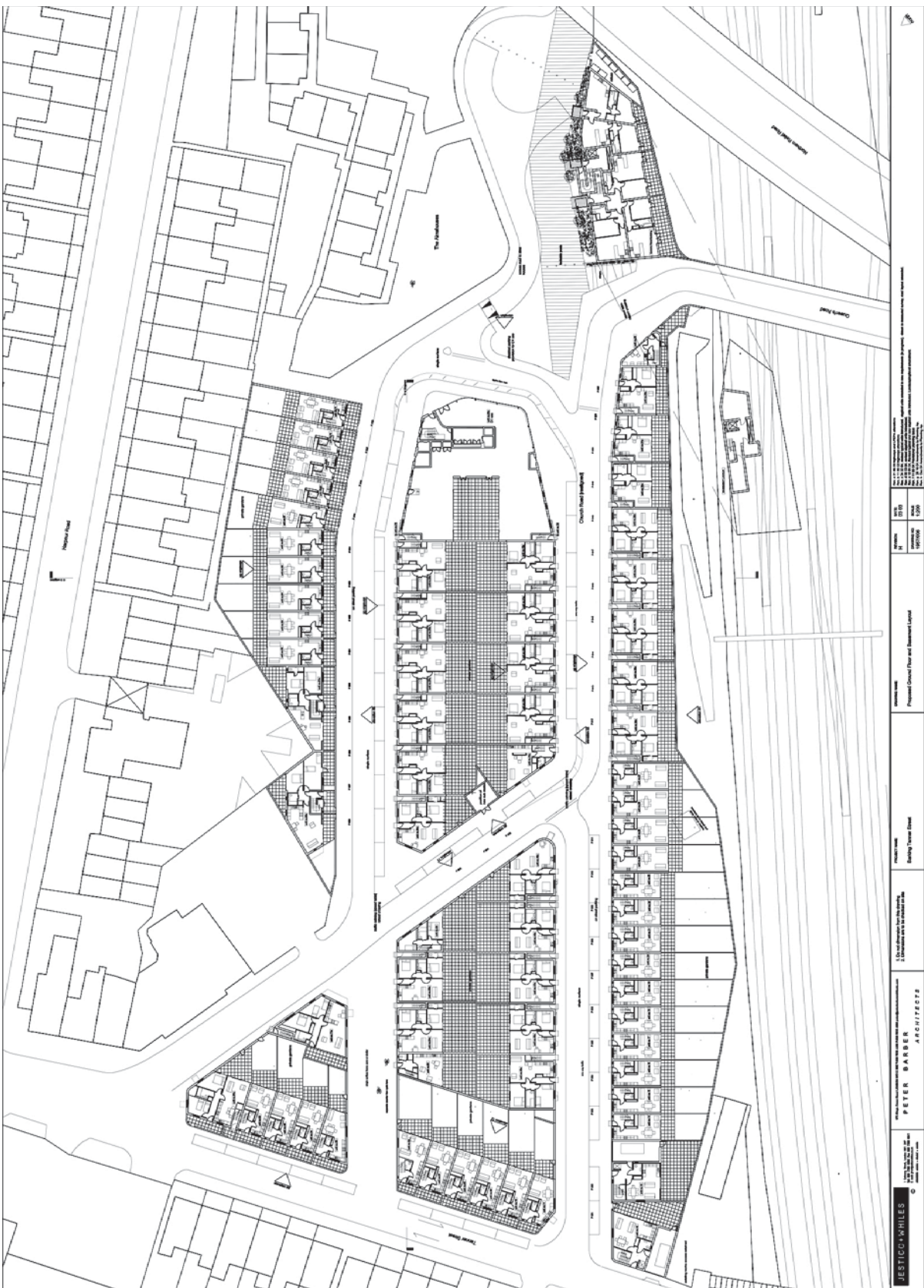
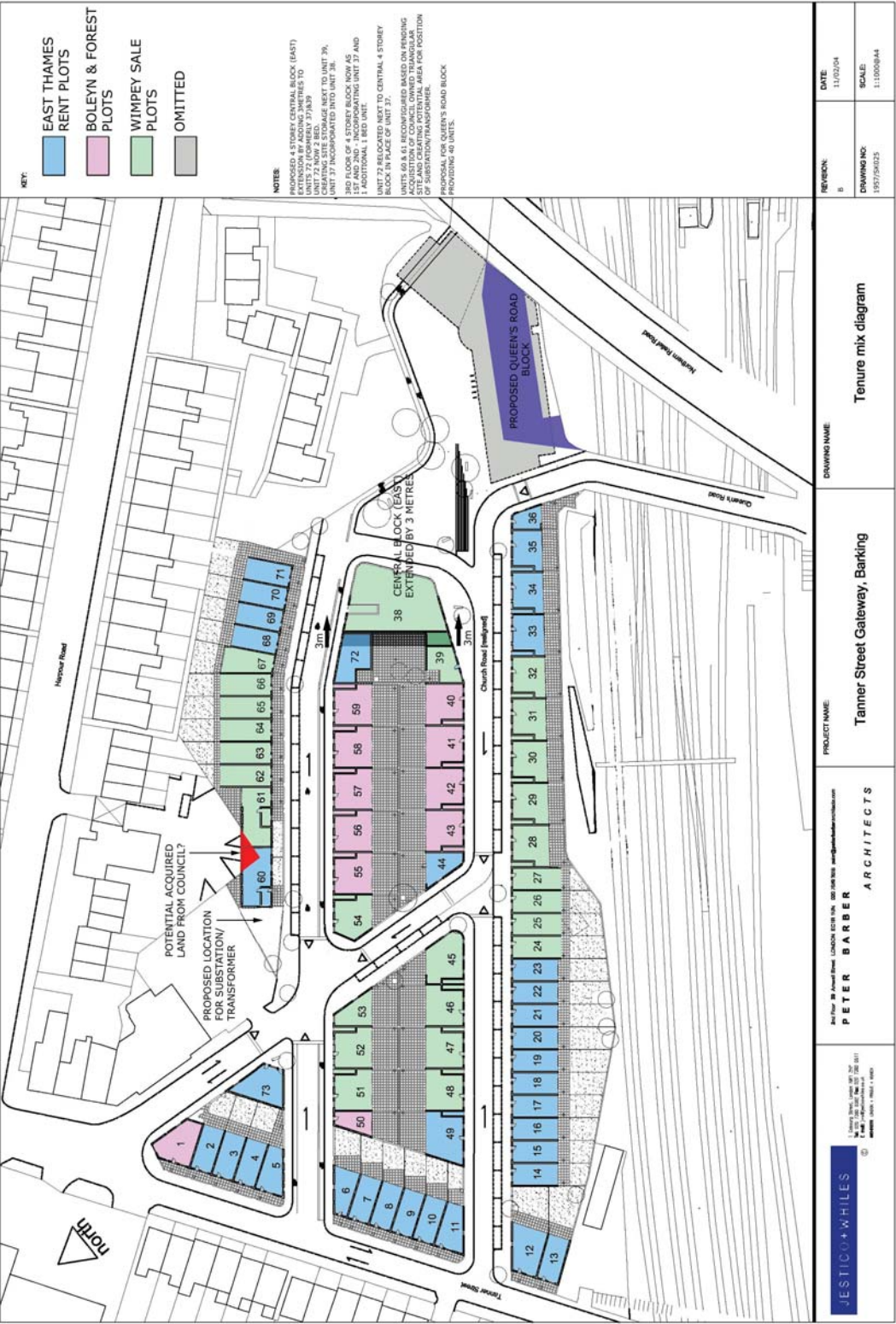


Image 4: Site plan of Tanner Street Estate



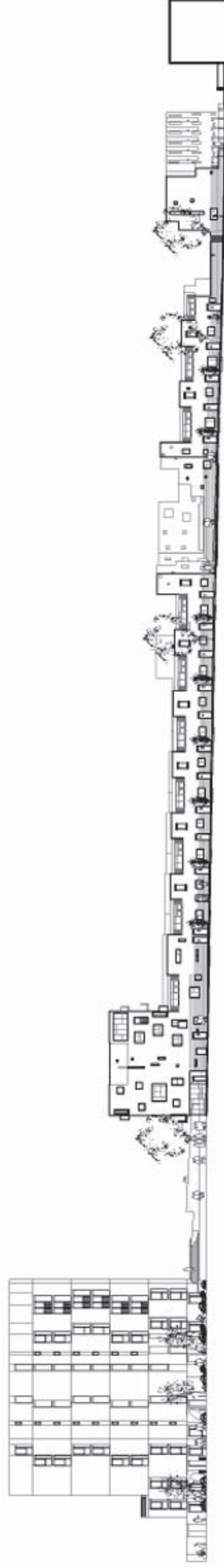
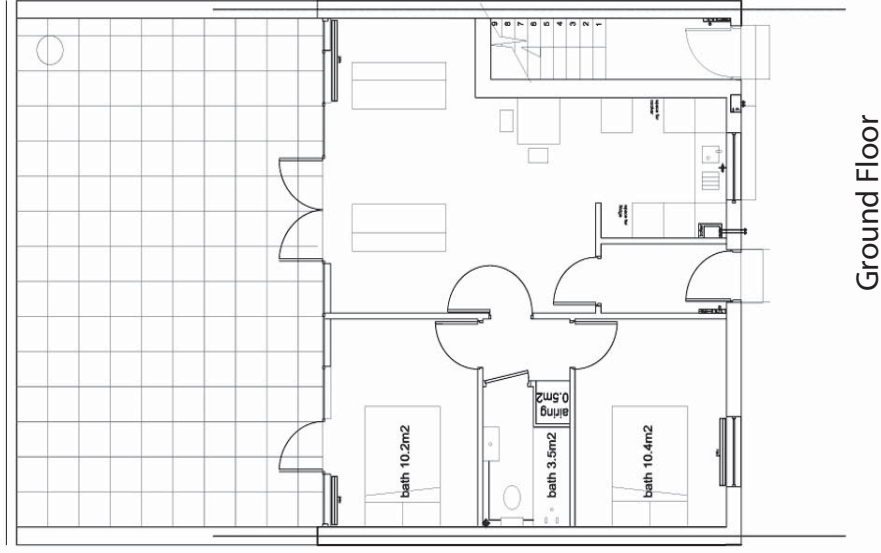
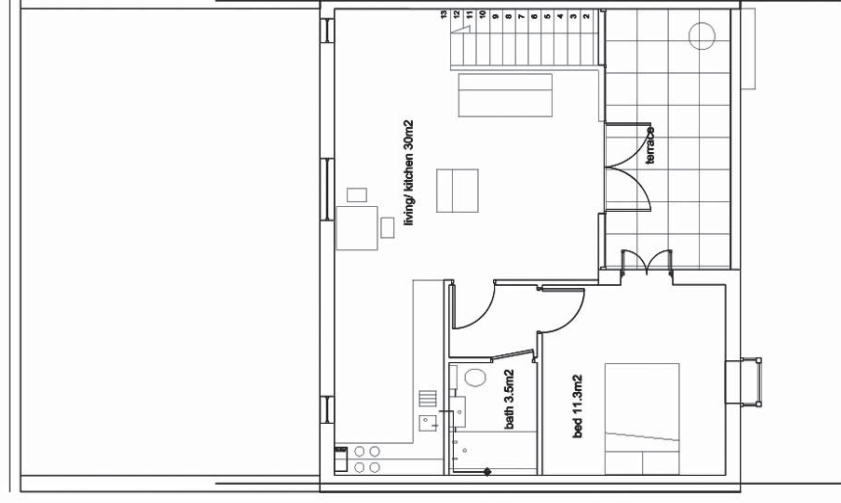


Image 6: Elevations of Tanner Street Estate

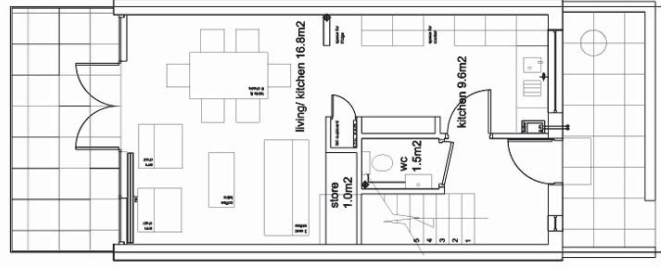


Ground Floor

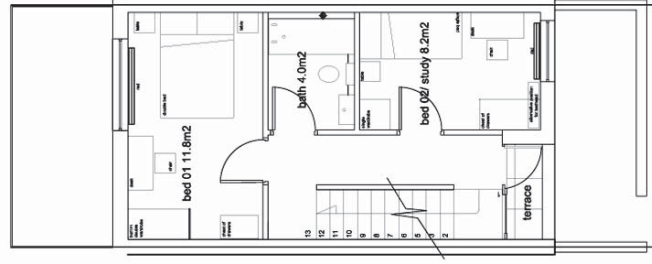


First Floor

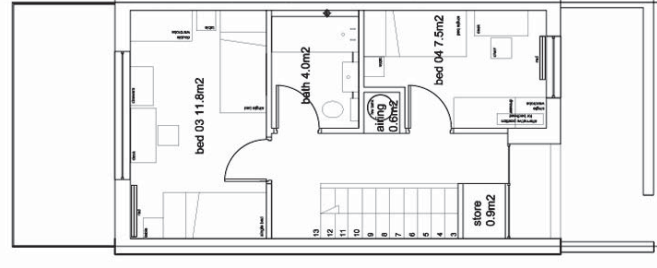
Image 7: Double-stack flat typology



Ground Floor



First Floor



Second Floor

Image 8: Town house typology

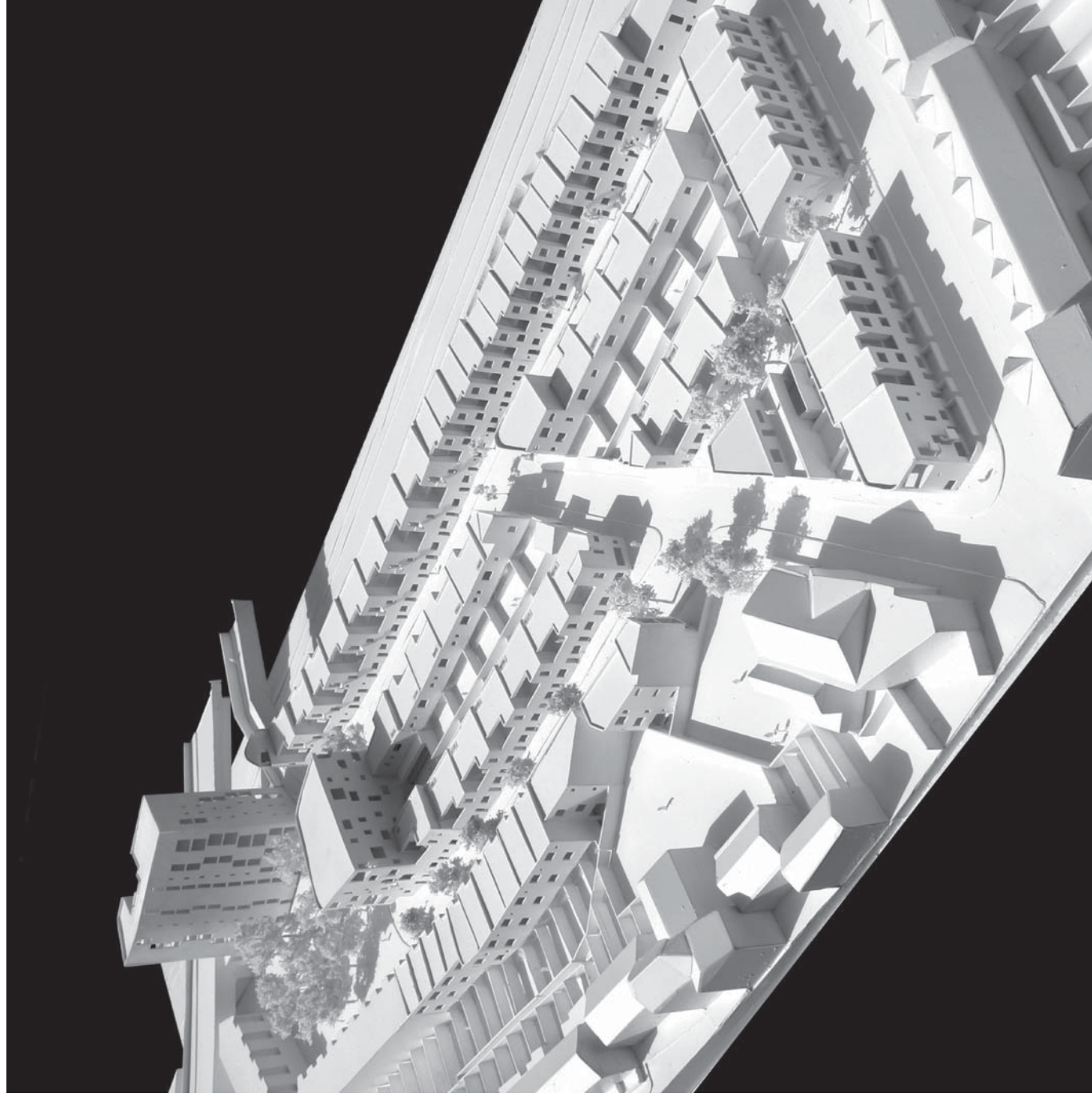


Image 9: Model of Tanner Street

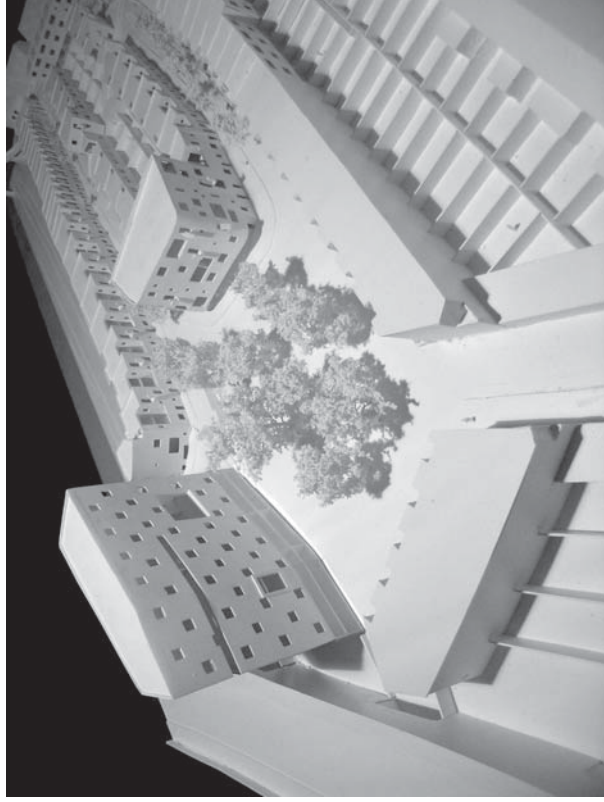
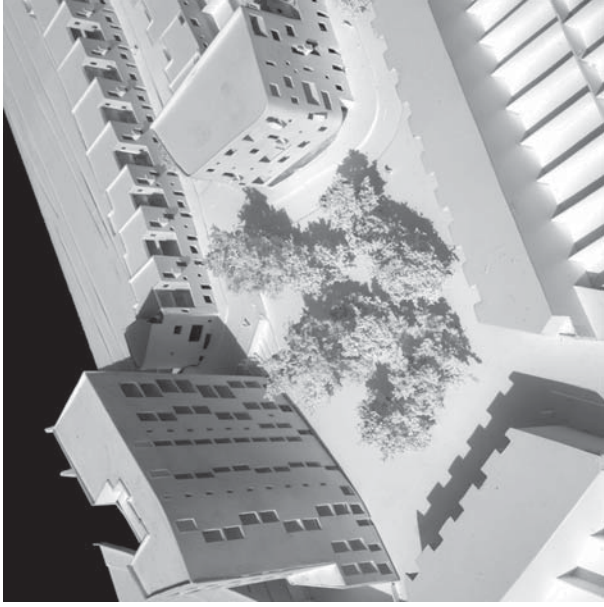


Image 10: Model photos

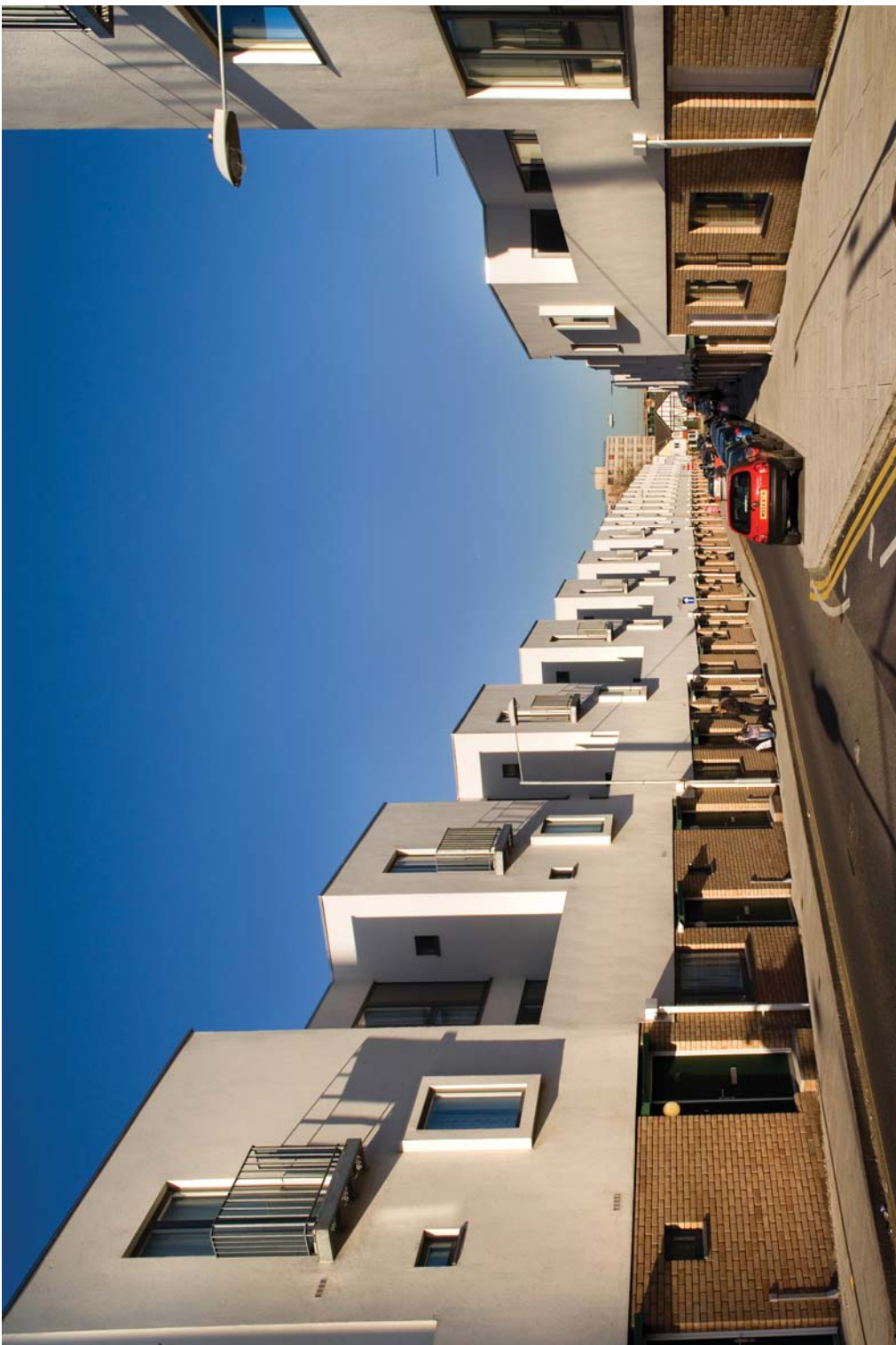
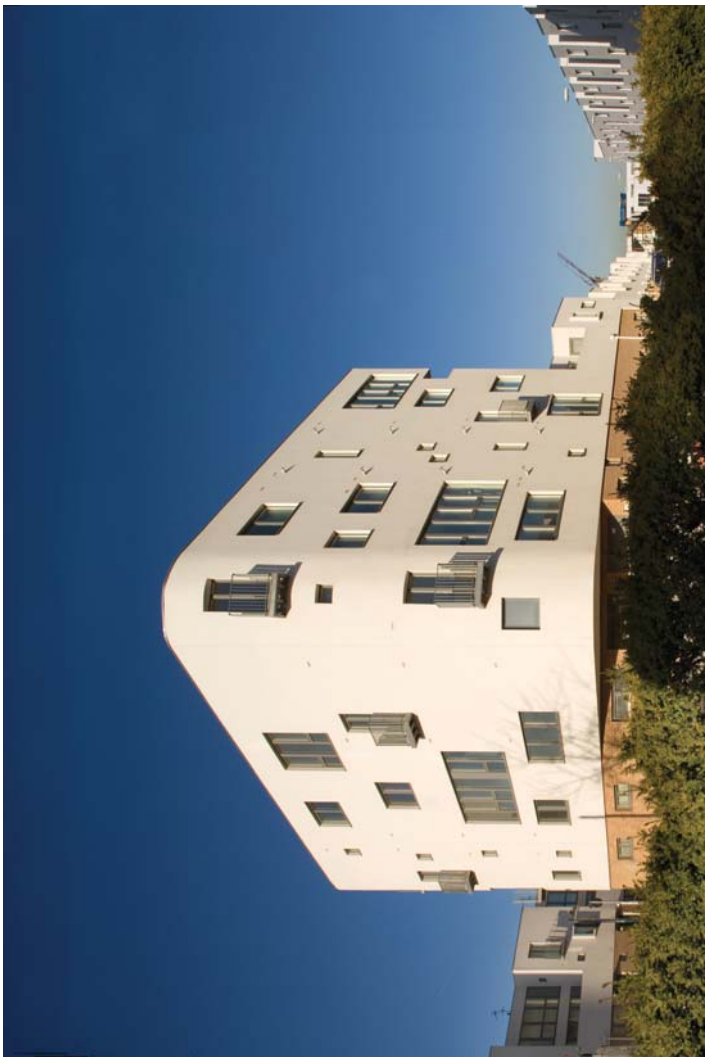


Image 11: Street view inside the Tanner Street Estate



Image 12: Views around Tanner Street Estate



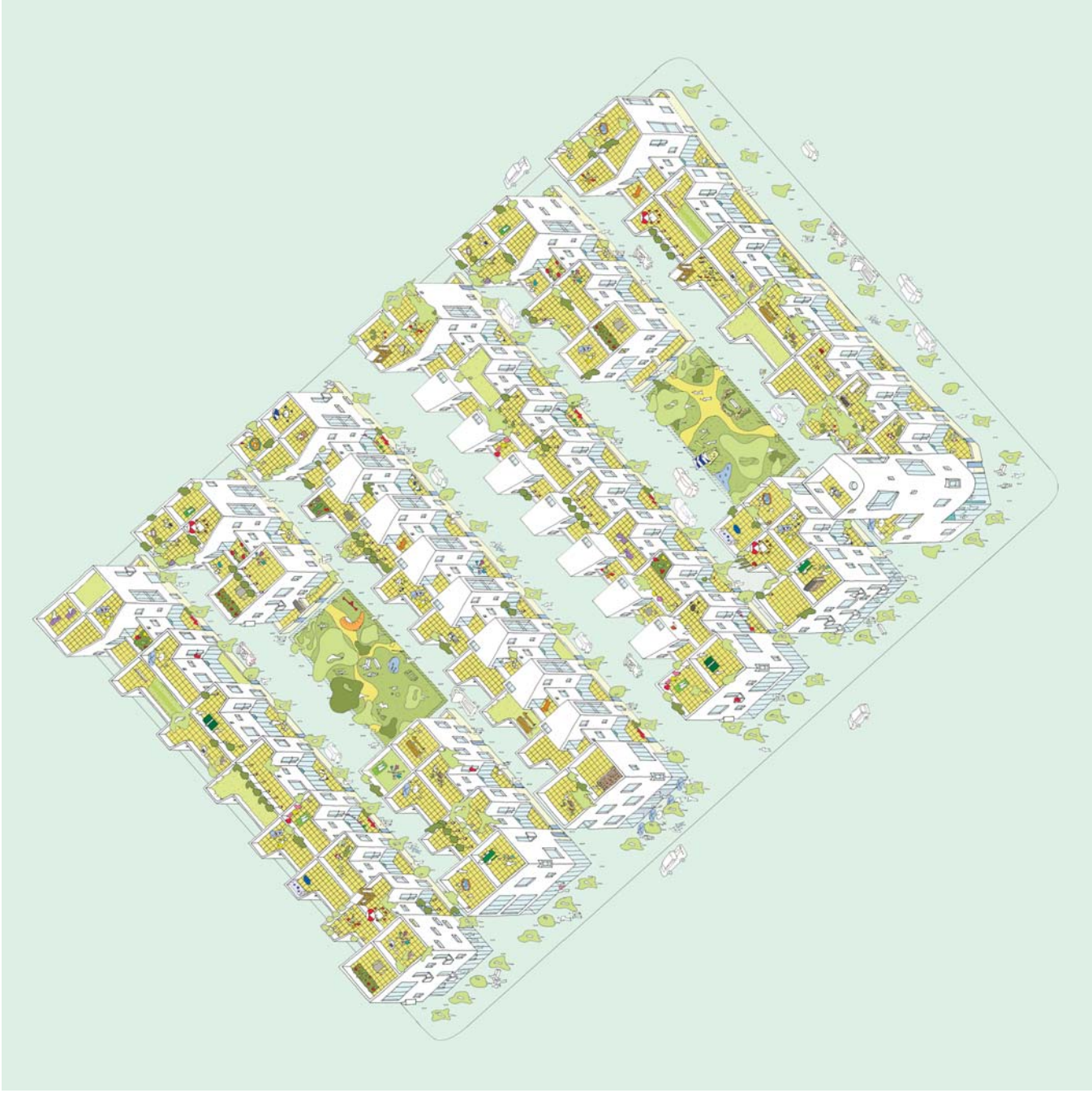
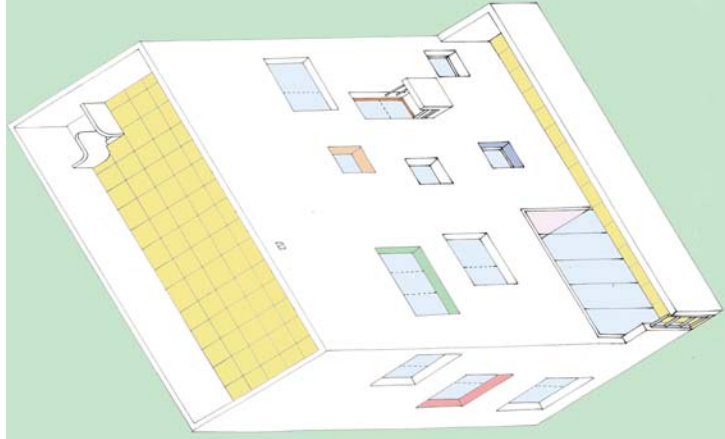


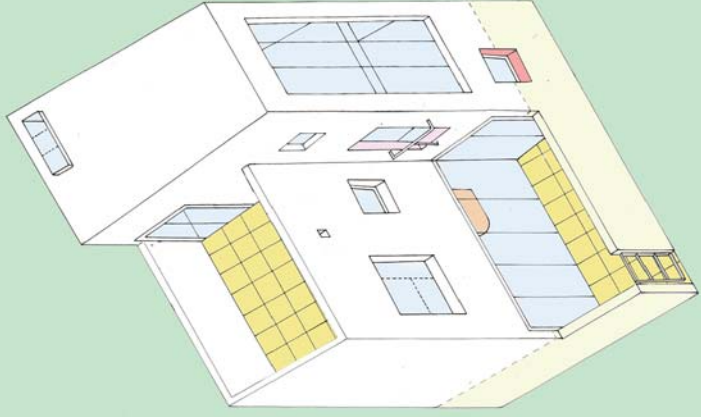
Image 13: Axonometric of proposed scheme for Morecambe



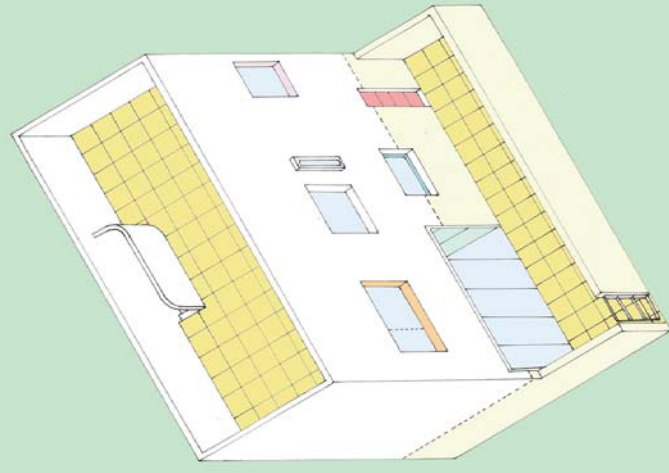
Image 14: Visualisations of Morecambe scheme



Type A



Type C



Type E

Image 15: Housing typologies for Morecambe scheme



Image 16: Sketch axonometric of the proposed Brittany Terrace scheme in Hove

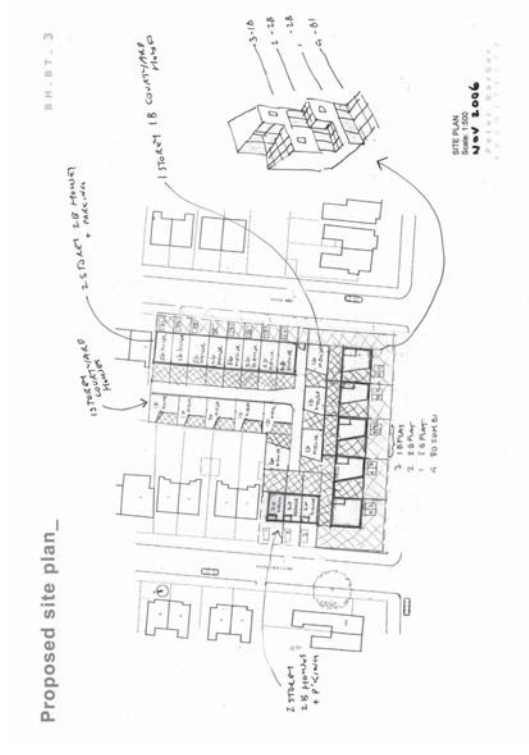


Image 17: Sketch proposals for Brittany Terrace, Hove

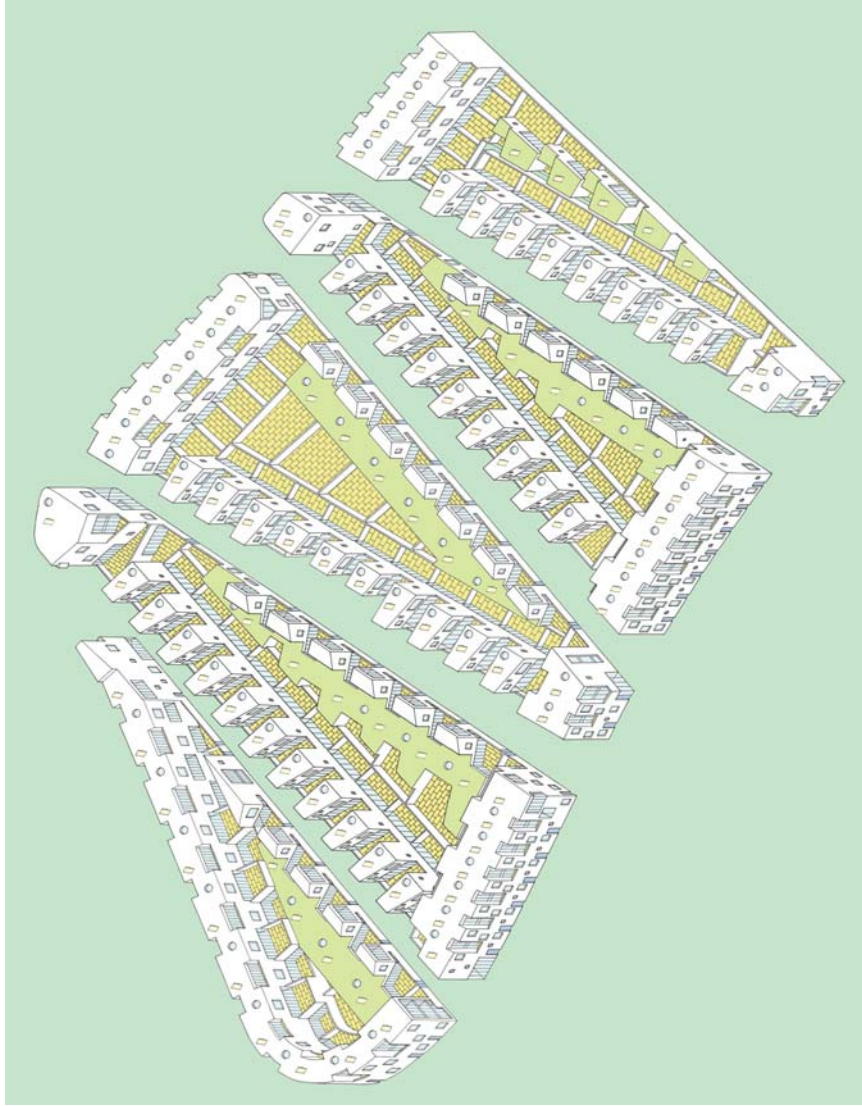
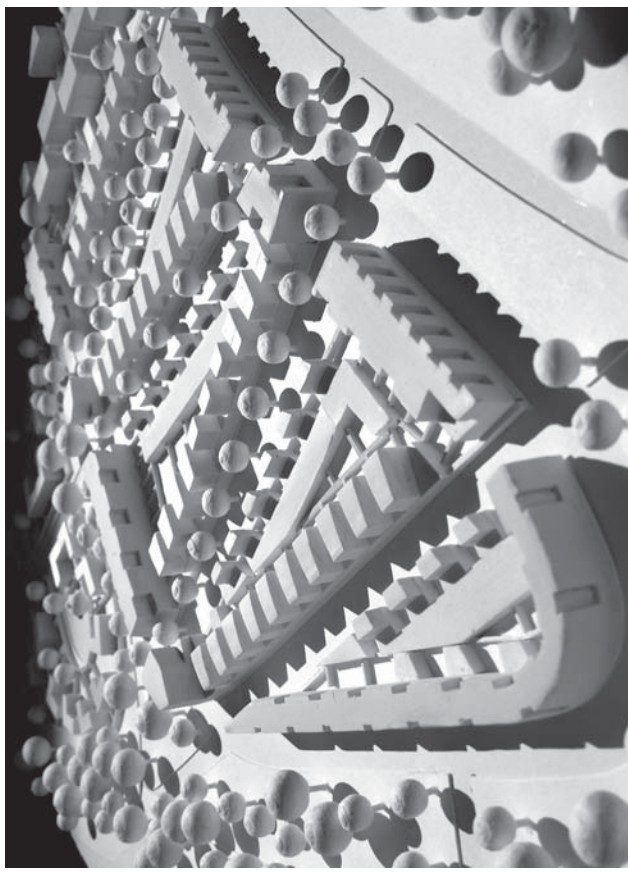
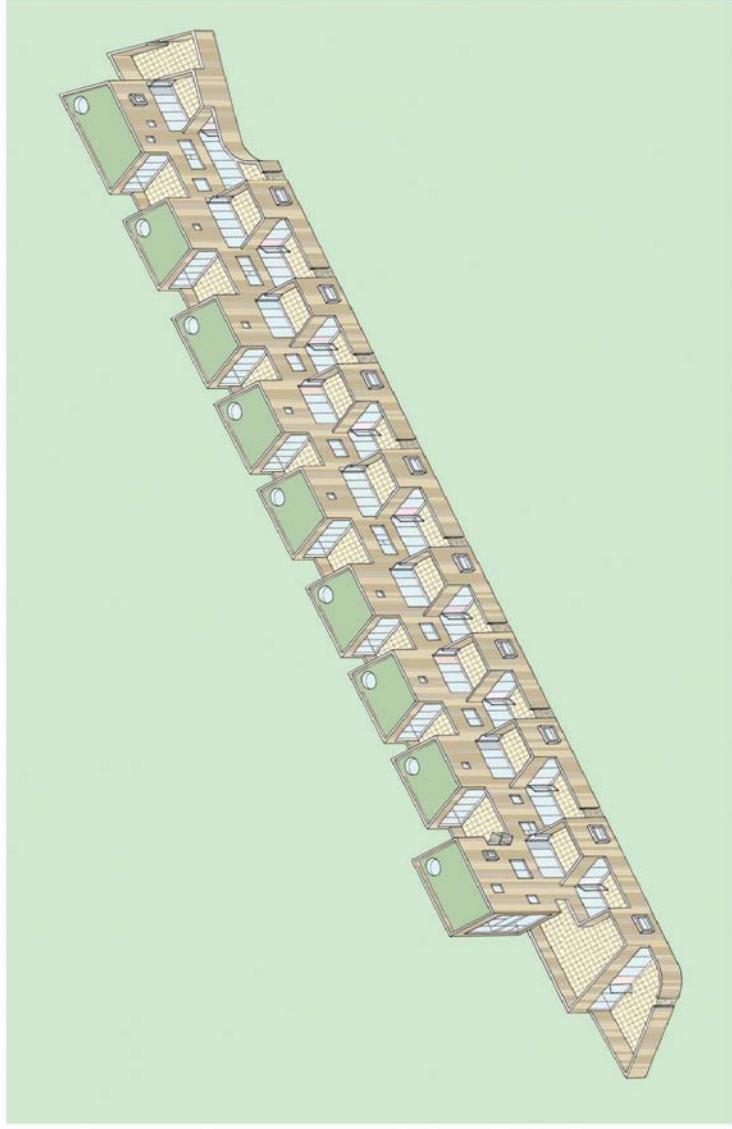


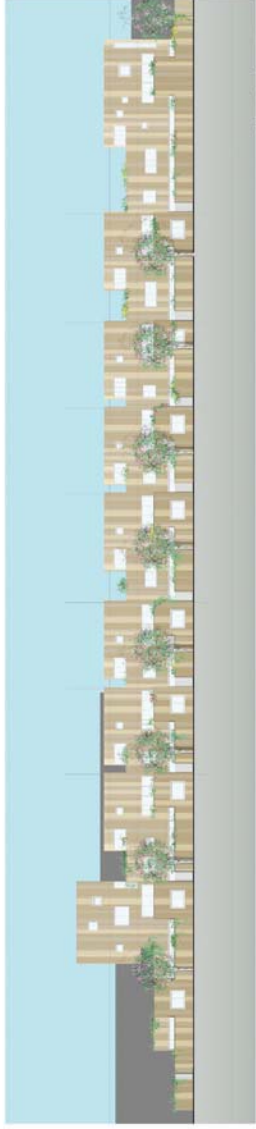
Image 18: Proposed infill housing scheme for Milton Keynes



STEPNEY GREEN ESTATE

Hannibal Road Gardens

- Re-providing 10 parking spaces plus 10 additional ones for new dwellings
- Residents using garages for storage units will be offered storage elsewhere on the site:
 - Sheds in ground floor maisonnette gardens
 - New storage sheds replacing blue and white sheds
- Creating a delightful landscaped community garden
- Creating new single surface road / pavement / parking with planting and trees introduced.
- New terrace of 9 family houses (3-6 bedrooms) constructed from timber as a continuation of the existing fences.
- Communal space is overlooked on all 4 sides improving security.



PETER BARBER
ARCHITECTS
For Southern Housing Group

Image 19: Proposal for Hannibal Road Gardens, Stepney Green Estate - example of the 'notched' terrace being translated into prefabricated timber-panel construction to cut costs and building time